

Studies Plan

Mineur : Data science 2023-24

Minor : Data science

	Courses			Exam Session	Exam	Credit
Language	Code	Section	Teacher			
	Advanced probability and applications					
E	COM-417	SC	Shkel	Sum	Written	8
	Algorithms I					
E	CS-250	IN	Kapralov Svensson	Sum	Written	8
	Algorithms II					
E	CS-450	IN	Svensson	Win	Written	8
	Applied biostatistics					
E	MATH-493	MA	Goldstein	Sum	During the semester	5
	Applied data analysis					
E	CS-401	SC	West	Win	Written	8
	Artificial intelligence					
F	CS-330	IN	Faltings	Sum	During the semester	4
	Artificial neural networks/reinforcement learning					
E	CS-456	IN	Gerstner	Sum	Written	6
	Brain-like computation and intelligence					
E	NX-414	NX	Mathis	Sum	Written	4
	Computer vision					
E	CS-442	IN	Fua	Sum	Written	6
	Data-intensive systems					
E	CS-300	IN	Ailamaki Kashyap	Sum	Written	6
	Data visualization					
E	COM-480	SC	Vuillon	Sum	During the semester	6
	Deep learning					
E	EE-559	EL	Cavallaro	Sum	During the semester	4
	Distributed information systems					
E	CS-423	SC	Aberer	Win	Written	6
	Foundations of Data Science					
E	COM-406	IN	Gastpar Urbanke	Win	Written	8
	Information security and privacy					
E	COM-402	IN	Payer	Win	Written	8
	Intelligent agents					
E	CS-430	IN	Faltings	Win	During the semester	6
	Internet analytics					
E	COM-308	SC	Grossglauser	Sum	Written	6
	Introduction to natural language processing					
E	CS-431	IN	Bosselut Chappelier Rajman	Win	Written	6
	Large-scale data science for real-world data					
E	COM-490	SC	Bouillet Delgado Sarni Verscheure	Sum	During the semester	6
	Machine learning					
E	CS-433	IN	Flammarion Jaggi	Win	Written	8
	Machine learning for behavioral data					
E	CS-421	IN		Sum	Written	6
	Modern natural language processing					
E	CS-552	IN	Bosselut	Sum	During the semester	8
	Networks out of control					
E	COM-512	SC	Grossglauser Thiran	Sum	Written	6

<i>E</i>	Optimization for machine learning CS-439	<i>IN</i>	<i>Flammarion Jaggi</i>	<i>Sum</i>	<i>Written</i>	<i>8</i>
<i>E</i>	Optional research project in Data Science COM-508	<i>SC</i>	<i>Profs divers</i>	<i>Sum Win</i>	<i>During the semester</i>	<i>8</i>
<i>E</i>	Risk, rare events and extremes MATH-447	<i>MA</i>		<i>Sum</i>	<i>Written</i>	<i>5</i>
<i>E</i>	Software construction CS-214	<i>IN</i>	<i>Kuncak Odersky Pit-Claudel</i>	<i>Win</i>	<i>Written</i>	<i>8</i>
<i>E</i>	Statistics for data science MATH-413	<i>MA</i>	<i>Rubin</i>	<i>Sum</i>	<i>Written</i>	<i>8</i>
<i>F</i>	Stochastic models in communication COM-300	<i>SC</i>	<i>Thiran</i>	<i>Win</i>	<i>Written</i>	<i>6</i>
<i>E</i>	Systems for data management and data science CS-460	<i>IN</i>	<i>Ailamaki Kerमारrec</i>	<i>Sum</i>	<i>Written</i>	<i>8</i>